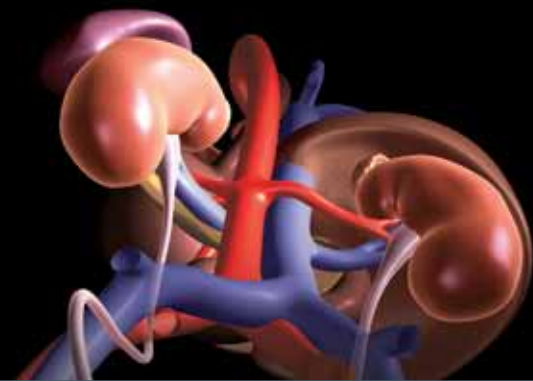


## Department of Nephrology Center for Renal Diseases



The Center for Renal Diseases is staffed with experienced nephrologists and medical staff who develop and implement customized treatment for kidney stones, polycystic kidney disease (PKD) and glomerulonephritis (GN). The center can manage a whole range of renal complications and is a leading participant in national PKD research.

### Areas of Focus

**Polycystic Kidney Disease Clinic | Kidney Stone Clinic | Glomerulonephritis Board**

The Center for Renal Diseases focuses on preventing kidney complications and treating renal problems before they become life-threatening. The center examines the genetics of PKD, new strategies for removing cysts, the impact of diet on kidney stone formation and the best treatment strategy for managing glomerular diseases.

Genetically inherited PKD is more common than the combined frequencies of cystic fibrosis, sickle cell disease, hemophilia, Huntington's disease, Down syndrome and muscular dystrophy.

### Polycystic Kidney Disease Clinic

The PKD Clinic uses a comprehensive diagnostic and treatment approach that includes genetic testing and counseling, imaging of the kidneys and liver, evaluation of kidney function, extensive medical evaluation, and a treatment program designed by an experienced nephrologist and medical staff.

- Expanded clinical services include diet and fluid management, monitoring by trained nurses and six-month evaluations by committed nephrologists.
- Specialized services for surgical management of PKD complications.
- Support from experienced pediatric nephrologists.
- A local information network is being planned to complement material provided by the PKD Research Foundation.
- A basic research team works in areas relevant to PKD, such as cell signaling pathways that affect cell growth, experimental work in biological models of PKD and kidney tissue studies.
- The PKD Clinic is engaged in important national PKD research studies (see Research).
- The center is actively building its PKD registry, which will serve as a valuable foundation for a comprehensive PKD Clinic.

### Kidney Stone Clinic

Experienced nephrologists in the Center for Renal Diseases shed light on why stones form. Physicians take an investigative approach using a combination of physical, blood and metabolic tests, kidney stone analysis and 24-hour urine collection to determine the cause for kidney stone formation. Patients leave with a better understanding of why kidney stones develop and what changes they can make in their everyday lives to prevent them.

- A joint effort with the Glickman Urological & Kidney Institute provides patients with accessible, comprehensive treatment. The center offers complete kidney stone management from surgical solutions to preventive strategies.
- A systematic approach to kidney stone management involves rigorous patient education so individuals can take an active role in prevention.
- The Kidney Stone Clinic partners with other Cleveland Clinic departments to evaluate and treat individuals who are predisposed to kidney stones, such as patients with gastrointestinal disorders.

About one-half of patients with PKD progress to kidney failure.

### Glomerulonephritis Board

As demonstrated in the field of cancer, the best outcomes for patients often result when cases are reviewed and treatment is defined by a team of medical professionals who can address every aspect of the disease. That is precisely the mission of the glomerulonephritis (GN) board.

- The board includes nephrologists, world-recognized vasculitis rheumatologists/immunologists, geneticists, renal pathologists and other interested physicians.
- Individual patient cases are presented in front of the board for review, and a treatment recommendation is made based on the kidney biopsy, clinical information and up-to-date treatment trials findings.
- Treatment recommendations include agents and strategies described in clinical trials throughout the world.
- The board participates in National Institutes of Health trials and other impact trials critical to understanding and treating glomerulonephritis.
- Patients benefit by following a comprehensive treatment regimen based on the latest clinical findings in all relevant fields.
- Requests for a case review by the GN board can be made by local nephrologists or patients.

### Experience

- More than 650 adult native kidney biopsies (not including kidney transplants) have been reviewed at Cleveland Clinic between 2004 and 2008.
- Review of complex diseases includes rapidly progressing glomerulonephritis/anti-glomerular basement membrane (anti-GBM) antibody disease, membranous glomerulonephritis, focal segmental glomerulosclerosis (FSGS) and lupus nephritis.

## Research

Cleveland Clinic is a leader in research to uncover innovative ways of managing PKD with the goal of establishing an evidence-based medical approach to the diagnosis and treatment of this disease.

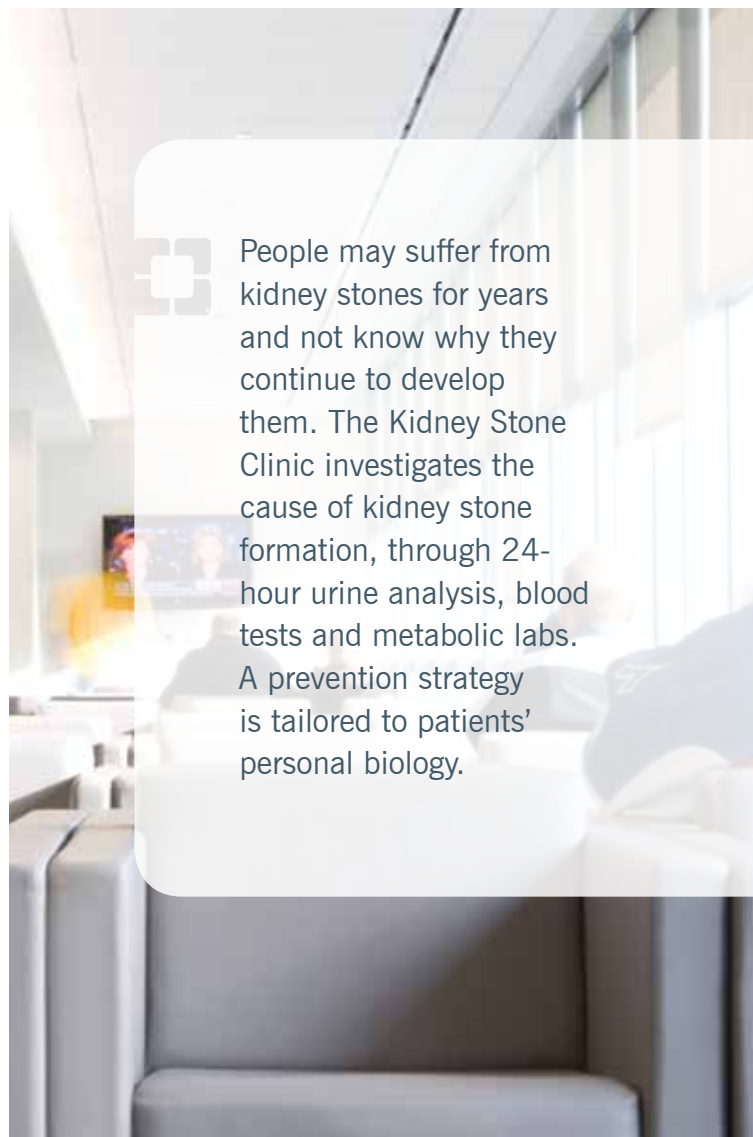
### HALT-PKD Trial

The Department of Nephrology is a participant in the first national randomized clinical trial of treatments for PKD. The HALT-PKD study involves individuals with autosomal dominant polycystic kidney disease (ADPKD), the most common inherited form of PKD. Participants are given drugs to control hypertension. The study will use kidney growth to measure the effectiveness of an intervention.

This study is important because hypertension complications, including stroke and heart attack, affect many more individuals with ADPKD than with ADPKD-specific conditions, such as liver cysts or brain aneurysms. The goal of this study is to discover methods to slow the progression of ADPKD and related health conditions.

### Cleveland Clinic Pilot Study

In addition to the HALT-PKD Trial, a pilot study is under way at Cleveland Clinic to examine the effects of sirolimus in reducing renal cysts and kidney volume in ADPKD patients. Traditionally, sirolimus is an immunosuppressant used in combination with cyclosporine and a steroid medication to prevent the body from rejecting a kidney transplant. The Center for Renal Diseases is at the forefront of research and testing of medications that could change the way PKD is treated in the future.



People may suffer from kidney stones for years and not know why they continue to develop them. The Kidney Stone Clinic investigates the cause of kidney stone formation, through 24-hour urine analysis, blood tests and metabolic labs. A prevention strategy is tailored to patients' personal biology.

For an appointment with a nephrologist,  
call **216.444.6771**

For more information,  
visit [clevelandclinic.org/nephrology](http://clevelandclinic.org/nephrology).